

IC-F121S
IC-F221S

(VHF transceiver)

(UHF transceiver)

Rugged

MIL-STD 810

- Powerful 50W (VHF), 45W (UHF) Output
- Simple Operation with Large Buttons and Volume Knob
- 4W typ. Front-mounted Speaker
- 8 Memory Channels with LED Display
- Interactive LED Lighting and Flexible Hanger Actions
- Built-in 2-Tone, 5-Tone, CTCSS, DTCS Encoder & Decoder
- Advanced Multi 2-tone/5-tone Systems (See overleaf for details)
- Standard DTMF Encoder and Optional DTMF Decoder with ANI Function
- Programmable Wide/Narrow Channel Spacing for Each Channel
- 2.5kHz Channel Step (U.S.A. VHF only)



ADDITIONAL FEATURES

Advanced Multi 2-tone/5-tone systems

- Programmable actions when a matched tone is received
 - LED lighting ON/OFF/Blink
 - Answer back calls
 - Beep sounds
 - Scan start/stop
 - Auto transmission
 - Stun/Kill functions (prevents use of a lost or stolen radio)
 - External out for horn drive (Optional OPC-617 is required)
- Ten 2-tone codes or eight 5-tone codes can be decoded on a channel
- Three call codes are programmable

SPECIFICATIONS

GENERAL

• Frequency coverage	: IC-F121S 136–174MHz IC-F221S 440–490MHz
• Number of channels	: 8 channels (4 channels × 2 banks)
• Channel spacing	: 12.5/25kHz, 15/30kHz
• PLL channel step	: VHF 2.5, 3.125kHz UHF 5, 6.25kHz
• Frequency stability	: VHF ±5.0ppm UHF ±2.5ppm
• Operating temp. range	: -30°C to +60°C; -22°F to +140°F
• Power supply voltage	: 13.6V DC
• Current drain (approx.)	: Tx VHF (50W) 14A UHF (45W) 13A Rx max. audio 1200mA standby 300mA
• Antenna impedance	: 50Ω (SO-239)
• Dimensions (WxHxD)	: 150×40×167.5mm; 5.9×3.2×6.6in
• Weight	: 1.1kg ; 2.4lb

TRANSMITTER

• Output power	: VHF 50W UHF 45W
• Max. freq. deviation	: ±5.0/2.5kHz (wide/narrow)
• Spurious emissions	: 70dB typ.
• Adjacent Ch. power	: 70/60dB (wide/narrow)
• Mic. impedance	: 600Ω (8-pin modular)

RECEIVER

• Sensitivity	: 0.25µV typ. (at 12dB SINAD)
• Squelch sensitivity	: 0.25µV typ.
• Adjacent Ch. selectivity	: 75/65dB typ. (wide/narrow)
• Spurious response	: 75dB
• Intermodulation	: 75dB typ.
• Audio output power	: 4W typ. at 10% distortion with a 4Ω load
• Ext. SP connector	: 2-conductor 3.5 (d) mm (1/8")/4Ω

Applicable U.S. Military Specifications

The IC-F121S/F221S has been tested to and passed the following MIL-STD requirements and strict environmental standards.

Standard	MIL 810 C	MIL 810 D	MIL 810 E	MIL 810 F
Method	Proc.	Method	Proc.	Method
Low Pressure	I	500.2	I, II	500.3 I, II
High Temp.	501.1	I	501.2 I, II	501.4 I, II
Low Temp.	502.1	I	502.2 I, II	502.3 I, II
Temp. Shock	503.1	I	503.2 I	503.4 I
Solar Radiation	505.1	I	505.2 I	505.3 I
Rain	506.1	I, II	506.2 I, II	506.3 I, II
Humidity	507.1	I, II	507.2 II, III	507.3 II, III
Salt Fog	509.1	I	509.2 I	509.3 I
Dust	510.1	I	510.2 I	510.3 I
Vibration	514.2	VIII, X	514.3 I	514.4 I
Shock	516.2	I, II, V	516.3 I, IV	516.4 I, IV

Supplied Accessories

- Hand mic. (HM-152)
- DC power cable
- Mounting bracket kit
- Hanger Kit
- Key assign stickers

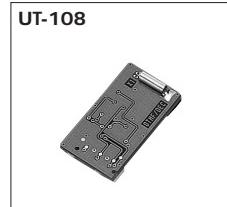
Measurements made in accordance with EIA-152C/204D, TIA-603. All stated specifications are subject to change without notice or obligation.

- **UT-109 VOICE SCRAMBLER UNIT** (Version 02)
Up to 32 non-rolling scrambling codes available.
- **UT-110 VOICE SCRAMBLER UNIT** (Version 02)
Up to 1020 (255 codes × 4 groups) rolling scrambling codes are available.

OPTIONS

Some options may not be available in some countries. Please ask your dealer for details.

- HM-152T DTMF MICROPHONE
- OPC-617 ACC CABLE
For external terminal connection.
- SM-25 DESKTOP MICROPHONE
Convenient for dispatching, equipped with monitor switch.



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